



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,825	07/28/2003	Ramabadran S. Raghavan	LUCW:0002	3721

7590
Michael G. Fletcher
Fletcher Yoder
P.O. Box 692289
Houston, TX 77269-2289

03/30/2007

EXAMINER

FERGUSON, KEITH

ART UNIT

PAPER NUMBER

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/628,825

Applicant(s)

RAGHAVAN ET AL.

Examiner

Keith T. Ferguson

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 2618

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 15, 22, 28 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee.

The claimed invention reads on Lee as follows:

Regarding claims 15 and 22, Lee discloses a base station (access network unit) (fig. 1 number 22) for use with a wireless internet network communications system (fig. 1), the access network unit comprising a communication interface to facilitate communication between the access network unit (fig. 1 number 22) and at least one dedicated device (fig. 1 number 10) over an wireless internet network (undedicated public network) (fig. 1 number 20), wherein the dedicated device (transceiver unit) (fig. 1 number 10) is configured to be directly coupled to the undedicated public network (fig. 1 number 20 and P:0006 lines 1-5).

Regarding claims 28 and 29, Lee discloses a method (fig. 3a) of communicating in a wireless communications system (fig. 1), the method comprising the act of: communicating information over a wireless internet network (undedicated public network) between at least one bi-directional antenna (transceiver unit) which is adapted to communicate over an air interface with

Art Unit: 2618

portable communications devices (fig. 3a), and a base station (access unit) which is adapted to process information (retrieve GPS information) (P:0017 lines 1-8), wherein the bi directional antenna (transceiver unit) is directly coupled to the wireless internet network (fig. 1 number 20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-8,10-12,23-27,30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Cho, newly recited reference.

Regarding claims 1-8,10-12, Lee discloses a wireless communications system (fig. 1) comprising at least one transceiver unit (base station) (tower) (structured transceiver) (building) (fig. 1 number 22) adapted to communicate over an air interface with a dedicated device (devices mobile station) (portable device) (cellular telephone) (fig. 1 number 10) and adapted to communicate over an undedicated public network (internet network) (service network) (fig. 1 number 20). Lee differs from claim 1 of the present invention in that it does not explicit disclose an access network unit adapted to communicated with the transceiver unit over the public network, wherein both the access network unit and transceiver unit are configured to be directly coupled to the undedicated public network. Cho teaches a base station controller (access network unit (fig. 1a number 91) adapted to communicate with a base station (fig. 1 number 90) and directly connected with the internet. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 2618

To modify lee with an access network unit adapted to communicated with the transceiver unit over the public network, wherein both the access network unit and transceiver unit are configured to be directly coupled to the undedicated public network in order for the system to control location information flow between the dedicated device and the GPS location server when requesting indoor GPS location information through the internet, as taught by Cho.

Regarding claims 23,27 and 31, Lee discloses a base station (access network unit) as discussed supra in claim 15 and 28 above. Lee differs from claim 23 of the present invention in that it does not explicit disclose an access network controller adapted to communicate with the transceiver server and with a services network. Cho teaches a base station controller (access network controller) (fig. 1 number 91) adapted to communicate with a base station (fig. 1a number 90) and with an internet network (fig.1a 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee with an access network controller adapted to communicate with the transceiver server and with a services network in order for the base station to receive control information when relaying information between the dedicated device and the internet, as taught by Cho.

Regarding claims 24-26,30 Lee discloses an access network unit as discussed supra in claims 15 and 23 above. Lee differs from claims 24-26 of the present invention in that it does not disclose at least one protocol layer between the transceiver server and the access network controller, the at least one protocol layer provides connectivity for network elements based on communications technology, the at least one protocol layer facilitates communication between the transceiver server and the access network controller. The examiner takes Official Notice that it is well known in the art at the time of the invention for at least one protocol layer between the transceiver server and the access network controller, the at least one protocol layer provides connectivity for network elements based on communications technology, the at least one protocol layer facilitates communication between the transceiver server and the access network controller in mobile wireless internet communication.

Art Unit: 2618

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Cho as applied to claims 1 and 7 above and in further view of Yuhara et al..

Regarding claim 9, the combination of Lee and Cho differs from claim 9 of the present invention in that they do not disclose a vehicle having at least one of a mobile telephone and a navigation system. Yuhara et al. teaches a vehicle having a cellular telephone and a GPS navigation system (paragraph 0034 and paragraph 0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Lee and Cho with a vehicle having at least one of a mobile telephone and a navigation system in order for communication system to provide GPS location services to the dedicated device to aid the device with location services when integrated with a vehicle, as taught by Yuhara et al..

6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Cho as applied to claims 1 and 12 above and in further view of Chang et al..

Regarding claims 13 and 14, the combination of Lee and Cho differs from claims 13 and 14 of the present invention in that they do not disclose the services network comprises a mobile switching center or a publicly switched telephone network. Chang et al. teaches a services network (mobile switching center) and a publicly switched telephone network (PSTN) (fig. 2 number 20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Lee and Cho with the services network comprises a

Art Unit: 2618

mobile switching center or a publicly switched telephone network in order for the system to provide the dedicated device service when roaming into a cellular area or emergency assistance information from a landline switching agency in case of a emergency assistance is needed, as taught by Chang et al..

7. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Aoki et al., newly recited reference.

Regarding claims 16 and 17, Lee discloses an access network unit as discussed supra in claim 15 above. Lee differs from claims 16 and 17 of the present invention in that it does not disclose a session initiation protocol (SIP) and an IP address of the at least one transceiver unit. Aoki et al. teaches a location information service network (col. 2 lines 15-25) comprising a session initiation protocol (SIP) (col. 3 lines 2-25) and an IP address of the at least one transceiver unit (col. 3 lines 2-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Lee with a session initiation protocol (SIP) and an IP address of the at least one transceiver unit in order for the system to allow the dedicated device an on-going session with the GPS server for internet coordinates that are indoor capable, and provide an internet address to the dedicated device for providing location services, as taught by Aoki et al..

Regarding claims 18-21, Lee discloses an access network unit as discussed supra in claims 15 and 16. Lee differs from claims 18-21 of the present invention in that it does not disclose the at least one protocol layer maps an IP address of the at least one transceiver unit to a communications technology supported by the at least one transceiver unit to facilitate transfer of information dependent upon such communications technology to the at least one transceiver unit,

Art Unit: 2618

the at least one protocol layer provides security information to the at least one transceiver unit to facilitate secure communication over the public network, the at least one protocol layer negotiates quality of service for communications with the at least one transceiver unit over the public network, the at least one protocol layer encapsulates higher layer protocol information to facilitate protocol requirements of the public network.

The examiner takes Official Notice that it is well known in the art at the time of the invention for at least one protocol layer maps an IP address of the at least one transceiver unit to a communications technology supported by the at least one transceiver unit to facilitate transfer of information dependent upon such communications technology to the at least one transceiver unit, the at least one protocol layer provides security information to the at least one transceiver unit to facilitate secure communication over the public network, the at least one protocol layer negotiates quality of service for communications with the at least one transceiver unit over the public network, the at least one protocol layer encapsulates higher layer protocol information to facilitate protocol requirements of the public network in mobile wireless internet communication.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (571) 272-7865. The examiner can normally be reached on 6:30am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Keith Ferguson
Art Unit 2618
March 22, 2006

KEITH FERGUSON
PRIMARY EXAMINER

